

GBU10005~GBU1010

Single Phase 10.0Amp Glass passivated Bridge Rectifiers

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Idea for printed circuit board
- Glass passivated Junction chip
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed 250°C/10 seconds at terminals

Mechanical Data

Case : Molded plastic body

Terminals : Solder plated, solderable per MIL-STD-750,Method 2026

Polarity : Polarity symbol marking on body

Mounting Position : Any

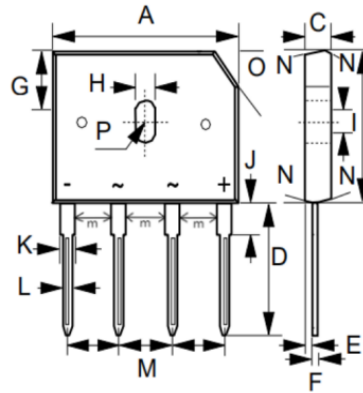
Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	GBU 10005	GBU 1001	GBU 1002	GBU 1004	GBU 1006	GBU 1008	GBU 1010	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current with heatsink	$I_{(AV)}$	10.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	200.0							A
Rating for fusing ($t=8.3ms$, $T_a=25^\circ C$)	I_t^2	166							A_s^2
Maximum instantaneous forward voltage at 5.0A	V_F	1.10							V
Maximum DC reverse current $T_A = 25^\circ C$ at rated DC blocking voltage $T_A = 125^\circ C$	I_R	5.0 500							μA
Typical junction capacitance (Note 1)	C_J	45.0							pF
Typical thermal resistance	R_{qJA}	55.0							$^\circ C/W$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150							$^\circ C$

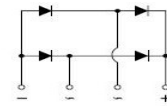
Note:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Mounted on glass epoxy PC board with 1.3mm² solder pad.
3. Device mounted on 50mm x 50mm x 1.6mm Cu Plate Heatsink.

GBU

GBU		
DIM	MIN	MAX
A	21.80	22.30
B	18.30	18.80
C	3.30	3.60
D	17.50	18.00
E	0.76	1.00
F	0.45	0.55
G	7.40	7.90
H	3.50	4.10
I	1.65	2.16
J	2.25	2.75
K	1.95	2.40
L	1.00	1.30
M	4.83	5.33
m	3.00	4.00
N	7.0° TYPICAL	
O	(3.2)×45°	
P	1.9 RADIUS	

All dimension in millimeter



Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

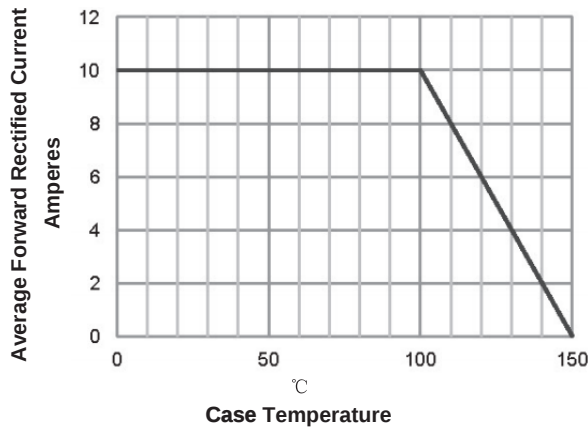


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

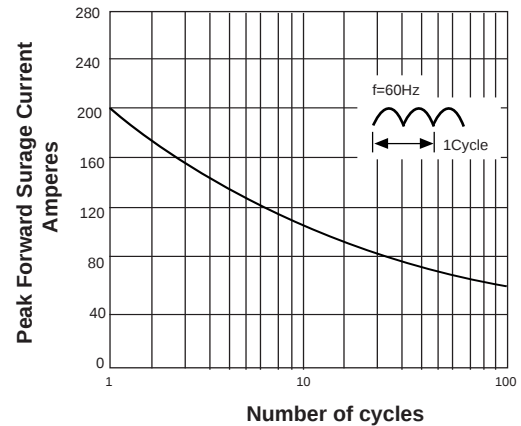


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

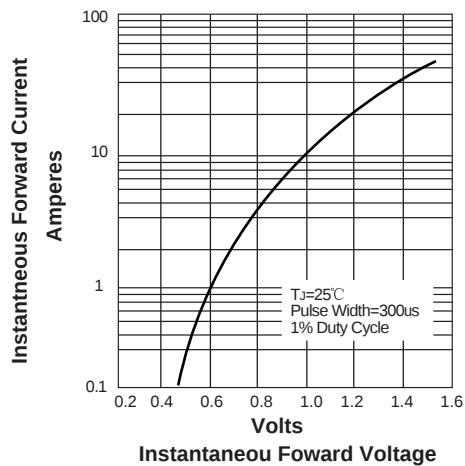


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

